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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,819	12/13/2001	Blair Wyman	ROC920010233US1	5947
7590	08/12/2005		EXAMINER YODER III, CHRISS S	
Steven W. Roth IBM Corporation, Dept. 917 3605 Highway 52 North Rochester, MN 55901-7829			ART UNIT 2612	PAPER NUMBER

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/021,819	WYMAN, BLAIR	
	Examiner	Art Unit	
	Chriss S. Yoder, III	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-32 and 34 is/are rejected.
- 7) ☒ Claim(s) 15, 26, and 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 3, 4, 6, 7, 9, 13, 16, 17, 18, 20, 24, 27, 28, 29, 31, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Scheurich (US Patent # 6,665,453).
2. In regard to claim 1, note Scheurich discloses the use of an electronic camera apparatus, comprising an electronic optical sensing apparatus, said electronic optical sensing apparatus sensing optical images and converting sensed images to an electronic signal (column 3, lines 60-65; and figure 5: 512), a buffer memory (column 3, lines 24-27; and figure 3:34), a video storage medium interface for storing video images captured by said optical sensing apparatus on a storage medium (column 2, lines 43-45; and figure 1:114), and a controller which operates said electronic camera apparatus in at least one mode, said at least one mode including a first mode wherein said controller concurrently causes said video storage medium interface to store motion video captured by said optical sensing apparatus on a video storage medium at a first resolution, and to temporarily store a video frames captured by said optical sensing apparatus in said buffer memory, and responsive to a first user command, saves at

Art Unit: 2612

least one frame from said buffer memory in a persistent form at a second resolution, said second resolution being finer than said first resolution (column 3, lines 24-47).

3. In regard to claim 3, note Scheurich discloses that the electronic optical sensing apparatus is mounted in a housing remote from said buffer memory, said video storage medium and said controller (column 2: lines 52-54; and figure 1:100 and 120).

4. In regard to claim 4, note Scheurich discloses that the controller comprises a programmable processor executing a control program for controlling the operation of said electronic camera apparatus (column 5, lines 19-24, the processor is programmed to control the camera based on the input signals).

5. In regard to claim 6, note Scheurich discloses that the controller operating in said first mode stores each video frame captured by said optical sensing apparatus in said buffer during a respective temporary period (column 4, lines 20-25; and figure 7:704 – 706; all of the high resolution images are stored).

6. In regard to claim 7, note Scheurich discloses that the controller operating in said first mode stores every Nth video frame captured by said optical sensing apparatus in said buffer during a respective temporary period, where $N > 1$ (column 5, lines 25-30; and figure 7:704 – 706; every fifth frame is high resolution, and all of the high resolution images are stored).

7. In regard to claim 9, note Scheurich discloses that the buffer is organized as at least one circular buffer in which the oldest stored frame is overwritten with a new frame when the new frame is captured (column 3, lines 38-42).

Art Unit: 2612

8. In regard to claim 13, note Scheurich discloses that said controller, responsive to said first user command, saves a fixed portion of the contents of said buffer memory in a persistent form at said second resolution, said fixed portion being less than all of the buffer contents (column 3, lines 40-45; only one image is saved, and this is considered the fixed portion less than all of the contents).

9. In regard to claims 16, 17, 18, 20, and 24, these are method claims, corresponding to the apparatus in claims 1, 3, 6, 7, 9, and 13. Therefore, claims 16, 17, 18, 20, and 24 has been analyzed and rejected as previously discussed with respect claims 1, 3, 6, 7, 9, and 13.

10. In regard to claim 27, note Scheurich discloses the use of method for operating an electronic camera apparatus, comprising capturing a continuous steam of optical images with an electronic optical sensing apparatus (column 3, lines 60-65; and figure 5: 512; and column 2, lines 43-45; and figure 1:114), temporarily storing image data from said continuous steam of optical images in a circular buffer, said circular buffer being continuously overwritten by new image data from said continuous stream of optical images (column 3, lines 24-42; and figure 3:34), responsive to a user command, saving at least some image data from said buffer in a persistent form (column 3, lines 24-47).

11. In regard to claim 28, note Scheurich discloses that the storage of motion video captured by said optical sensing apparatus on a video storage medium at a first resolution, and to temporarily store a video frames captured by said optical sensing apparatus in said buffer memory, and responsive to a first user command, saves at

Art Unit: 2612

least one frame from said buffer memory in a persistent form at a second resolution, said second resolution being finer than said first resolution (column 3, lines 24-47).

12. In regard to claim 29, note Scheurich discloses that the controller operating in said first mode stores every Nth video frame captured by said optical sensing apparatus in said buffer during a respective temporary period, where $N > 1$ (column 5, lines 25-30; and figure 7:704 –706; every fifth frame is high resolution, and all of the high resolution images are stored).

13. In regard to claim 31, note Scheurich discloses that said controller, responsive to said first user command, saves a fixed portion of the contents of said buffer memory in a persistent form at said second resolution, said fixed portion being less than all of the buffer contents (column 3, lines 40-45; only one image is saved, and this is considered the fixed portion less than all of the contents).

14. In regard to claim 34, this is a program product claim, corresponding to the apparatus in claim 1. Therefore, claim 34 has been analyzed and rejected as previously discussed with respect claim 1

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2612

15. Claims 2, 10, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheurich (US Patent # 6,665,453) in view of Belz et al. (US PGPub # 2003/0090572).

16. In regard to claim 2, note Scheurich discloses the use of an electronic camera apparatus as claimed in claim 1 above. Therefore, it can be seen that Scheurich fails to disclose that an optical sensing apparatus, buffer memory, storage medium and controller mounted within a common hand-held camera housing. Belz discloses the use of a handheld device that includes an optical sensing apparatus, buffer memory, storage medium and controller mounted within a common hand-held camera housing (figure 3: 300 and figure 5: 300). It is well known in the art that the use of an optical sensing apparatus, buffer memory, storage medium and controller mounted within a common hand-held camera housing in a handheld device is preferred in order to create a portable device that the user can carry with them. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Scheurich device to include the use of an optical sensing apparatus, buffer memory, storage medium and controller mounted within a common hand-held camera housing for portability.

17. In regard to claim 10, note Scheurich discloses the use of an electronic camera apparatus as claimed in claim 9 above that includes the use of a circular buffer to store the captured images. Therefore, it can be seen that Scheurich fails to disclose that the buffer is organized as a plurality of circular buffers, each circular buffer storing frames at a respective resolution, a first circular buffer storing frames at a higher resolution than a second circular buffer. Belz discloses the use of a storage medium that is organized as

Art Unit: 2612

a plurality of buffers, each buffer storing frames at a respective resolution, the first buffer storing frames at a higher resolution than a second buffer (paragraphs 60-61). Belz teaches that the storage of different size images is preferred in order to store a large number of images (paragraph 61). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Scheurich device to include the use of a plurality of buffers storing different resolutions in order to store a large number of images as suggested by Belz.

18. In regard to claim 21, this is a method claim, corresponding to the apparatus in claim 10. Therefore, claim 21 has been analyzed and rejected as previously discussed with respect claim 10.

19. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scheurich (US Patent # 6,665,453).

20. In regard to claim 5, note Scheurich discloses the use of an electronic camera apparatus as claimed in claim 1 above. Therefore, it can be seen that Scheurich fails to disclose that the optical sensing apparatus comprises a charge-coupled device (CCD) array. Official notice is taken that the concepts and advantages of the use of a CCD as an optical sensing apparatus are notoriously well known and expected in the art.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the Scheurich device to include the use of a CCD as an optical sensing apparatus in order to reduce cost, size and power consumption.

Art Unit: 2612

21. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheurich (US Patent # 6,665,453) in view of Makishima et al. (US Patent # 6,549,307).

22. In regard to claim 11, note Scheurich discloses the use of an electronic camera apparatus as claimed in claim 1 above. Therefore, it can be seen that Scheurich fails to disclose that the resolution of frames stored in said buffer is a user-selectable parameter. Makishima disclose the use of user-selectable resolution of images (column 4, lines 50-57). Makishima teaches that the use of a user-selectable resolution is preferred in order to allow the user to select the resolution for the purpose desired, e.g. printing or display (column 1, lines 10-23). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Scheurich device to include the use of user-selectable resolution as suggested by Makishima.

23. In regard to claim 22, this is a method claim, corresponding to the apparatus in claim 11. Therefore, claim 22 has been analyzed and rejected as previously discussed with respect claim 11.

24. Claims 8, 12, 14, 19, 23, 25, 30, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheurich (US Patent # 6,665,453) in view of Marchese (US Patent # 6,891,566).

25. In regard to claim 8, note Scheurich discloses the use of an electronic camera apparatus as claimed in claim 1 above. Therefore, it can be seen that Scheurich fails to disclose that N is a user-selectable parameter. Marchese discloses that the user can select which frames to record (column 8, lines 24-27; the interval is considered to be N).

Art Unit: 2612

Marchese teaches that the storage of user-selectable portion of the contents of a memory is preferred in order to store only the frames the user wants to keep (column 8, lines 24-30). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Scheurich to include the storage of user-selectable portion of the contents of a memory as suggested by Marchese.

26. In regard to claim 12, note Scheurich discloses the use of an electronic camera apparatus as claimed in claim 1 above. Therefore, it can be seen that Scheurich fails to disclose that said controller, responsive to said first user command, saves the entire contents of said buffer memory in a persistent form at said second resolution.

Marchese disclose the use of a user configurable setting which saves the entire contents of a memory (column 8, lines 24-30). Marchese teaches that the storage of the entire contents of a memory is preferred in order to store all frames that have been received (column 8, lines 24-30). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Scheurich to include the storage of the entire contents of a memory as suggested by Marchese.

27. In regard to claim 14, note Scheurich discloses the use of an electronic camera apparatus as claimed in claim 1 above. Therefore, it can be seen that Scheurich fails to disclose that said controller, responsive to said first user command, saves a user-selectable portion of the contents of said buffer memory in a persistent form at said second resolution, said user-selectable portion being potentially less than all of the buffer contents. Marchese disclose the use of a user configurable setting which saves a user-selectable portion of the contents of a memory (column 8, lines 24-30). Marchese

Art Unit: 2612

teaches that the storage of user-selectable portion of the contents of a memory is preferred in order to store only the frames the user wants to keep (column 8, lines 24-30). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Scheurich to include the storage of user-selectable portion of the contents of a memory as suggested by Marchese.

28. In regard to claim 19, this is a method claim, corresponding to the apparatus in claim 8. Therefore, claim 19 has been analyzed and rejected as previously discussed with respect claim 8.

29. In regard to claims 23 and 25, these are method claims, corresponding to the apparatus in claims 12 and 14. Therefore, claims 23 and 25 has been analyzed and rejected as previously discussed with respect claims 12 and 14.

30. In regard to claim 30, note Scheurich discloses the use of a method for operating an electronic camera apparatus as claimed in claim 29 above. Therefore, it can be seen that Scheurich fails to disclose that N is a user-selectable parameter. Marchese discloses that the user can select which frames to record (column 8, lines 24-27; the interval is considered to be N). Marchese teaches that the storage of user-selectable portion of the contents of a memory is preferred in order to store only the frames the user wants to keep (column 8, lines 24-30). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Scheurich to include the storage of user-selectable portion of the contents of a memory as suggested by Marchese.

31. In regard to claim 32, note Scheurich discloses the use of a method for operating an electronic camera apparatus as claimed in claim 27 above. Therefore, it can be

Art Unit: 2612

seen that Scheurich fails to disclose that said controller, responsive to said first user command, saves a user-selectable portion of the contents of said buffer memory in a persistent form at said second resolution, said user-selectable portion being potentially less than all of the buffer contents. Marchese disclose the use of a user configurable setting which saves a user-selectable portion of the contents of a memory (column 8, lines 24-30). Marchese teaches that the storage of user-selectable portion of the contents of a memory is preferred in order to store only the frames the user wants to keep (column 8, lines 24-30). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Scheurich to include the storage of user-selectable portion of the contents of a memory as suggested by Marchese.

Allowable Subject Matter

32. Claims 15, 26, and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

33. As for claims 15, the prior art does not teach or fairly suggest the use of an electronic camera apparatus having a buffer that stores captured images, and wherein user-selectable portion of the buffer to be saved is determined by playing the contents of said buffer backwards to the user on a display of said camera, and receiving a user selection corresponding to a beginning frame to be saved in said persistent form.

34. As for claims 26, the prior art does not teach or fairly suggest the use of method for an electronic camera apparatus having a buffer that stores captured images, and wherein user-selectable portion of the buffer to be saved is determined by playing the

Art Unit: 2612

contents of said buffer backwards to the user on a display of said camera, and receiving a user selection corresponding to a beginning frame to be saved in said persistent form.

35. As for claims 33, the prior art does not teach or fairly suggest the use of method for an electronic camera apparatus having a buffer that stores captured images, and wherein user-selectable portion of the buffer to be saved is determined by playing the contents of said buffer backwards to the user on a display of said camera, and receiving a user selection corresponding to a beginning frame to be saved in said persistent form.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US006812962B1: note the use of a directory structure for storing different resolution images.

US005608862A: note the use of a memory for storing different resolution images.

US006680748B1: note the use of a camera for capturing motion video concurrently with still images.

US 20030031469A1: note the use of a camera for capturing motion video concurrently with still images.

US006904178B2: note the use of a camera that can capture multiple resolution images.

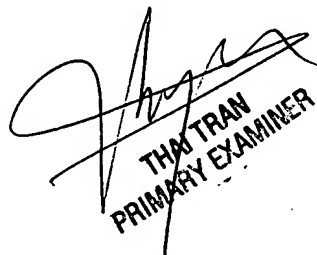
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chriss S. Yoder, III whose telephone number is (571) 272-7323. The examiner can normally be reached on M-F: 8 - 4:30.

Art Unit: 2612

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ^{Thoi Tran}~~Wendy Garber~~ can be reached on (571) 272-⁷³⁸²~~7308~~. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CSY
August 5, 2005


THOI TRAN
PRIMARY EXAMINER